

# 2016 Archaeological Investigations New Bedford Harbor Superfund Site

July 12, 2017

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The Public Archaeology Laboratory, Inc.

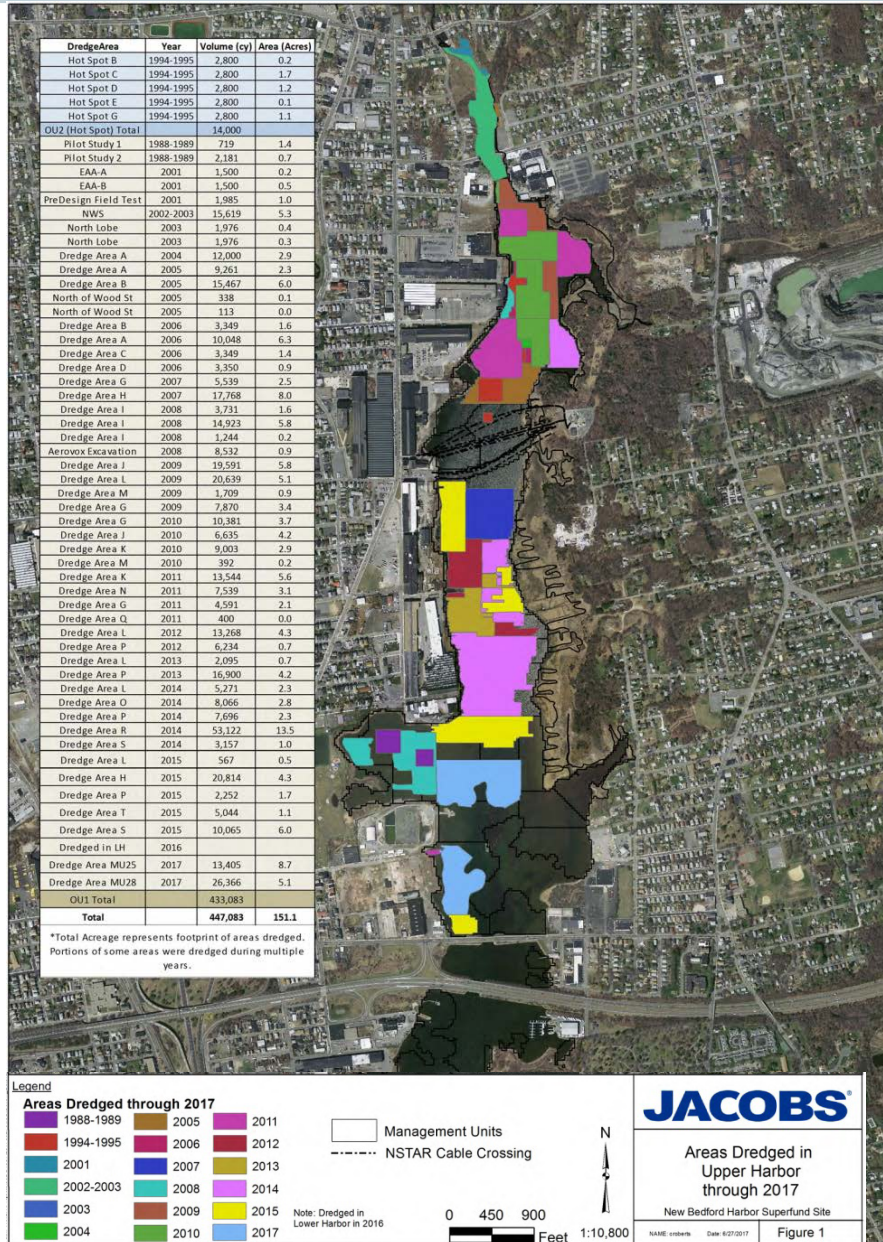


A History of Preservation and Progress Since 1982

# NBHSS Project

## Operable Unit #1: New Bedford Harbor Superfund Site (NBHSS) – Upper and Lower Harbor

- Contaminated by PCBs, heavy metals, oils, and greases
- Remediation of contaminated sediments
- Marine and terrestrial remediation



# Authority

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Conducted in accordance with the **Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)** (1980) as amended by the **Superfund Amendments and Reauthorization Act (SARA)** (1986)

Requires meeting the substantive requirements for federal and state permitting and standards of **Section 106 of the National Historic Preservation Act of 1966**, as amended and **M.G.L. Chapter 9, Sections 26–27C**, as also amended.

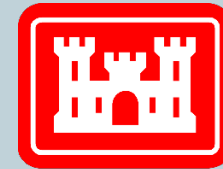
- Section 106 and M.G.L. require project proponents to consider the effects that their project will have on historic properties eligible or potentially eligible for listing in the State/National Registers of Historic Places.

# Federal and State Review Agencies

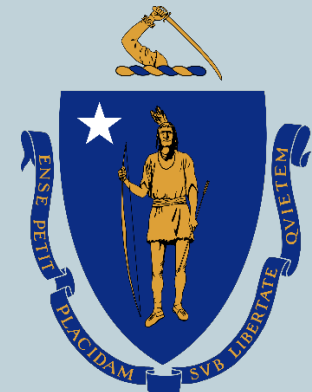
Environmental Protection Agency

U.S. Army Corps of Engineers

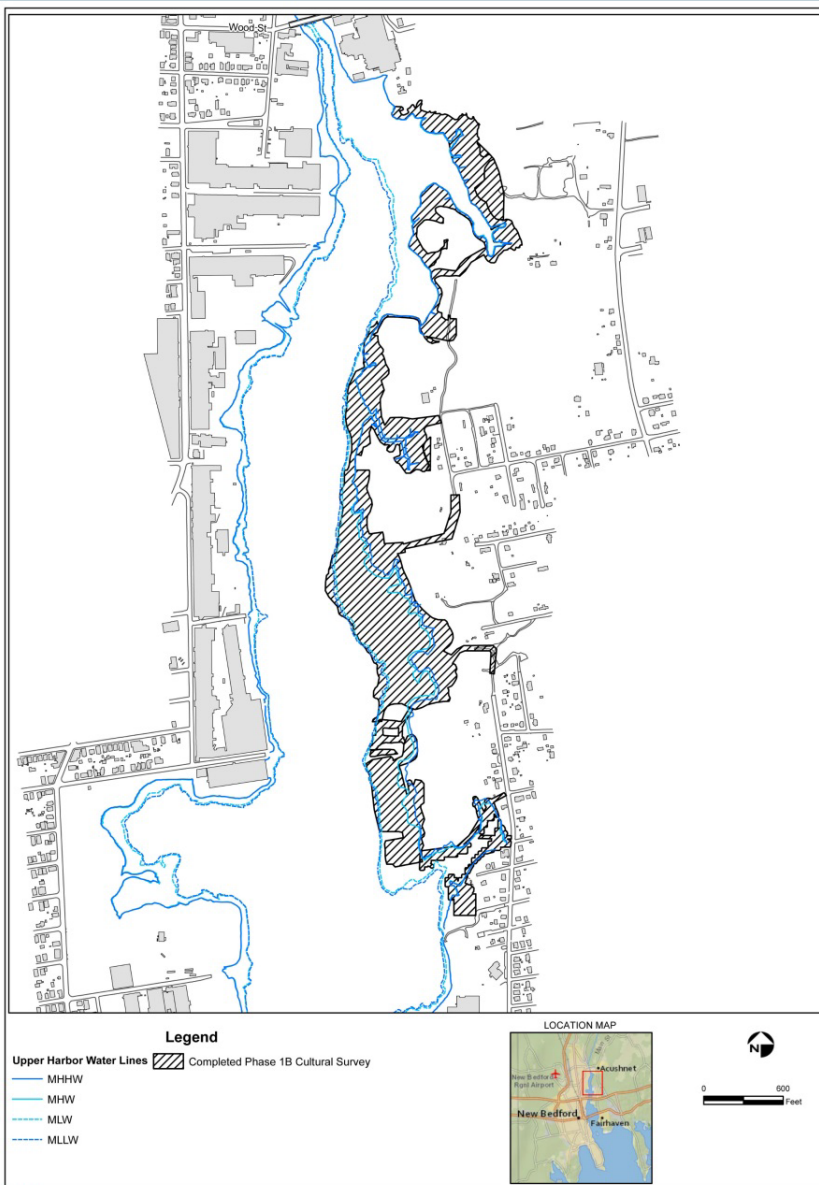
Massachusetts Historical Commission (MHC) and Massachusetts Board of Underwater Archaeological Resources (BUAR)



**US Army Corps  
of Engineers®**



# History of Archaeological Investigations



## **DOLAN RESEARCH, INC.**

Marine survey (2000)

## **JOHN MILNER ASSOCIATES, INC.**

Reconnaissance/Phase I surveys (2001 – 2003)

## **PAL**

Phase I/II surveys (2003, 2006, 2016);

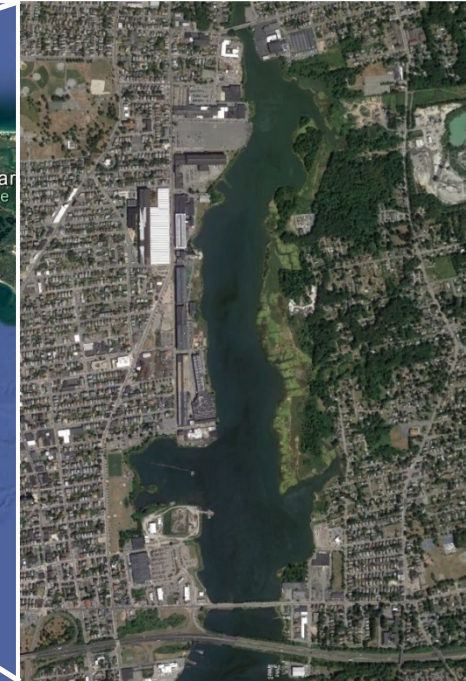
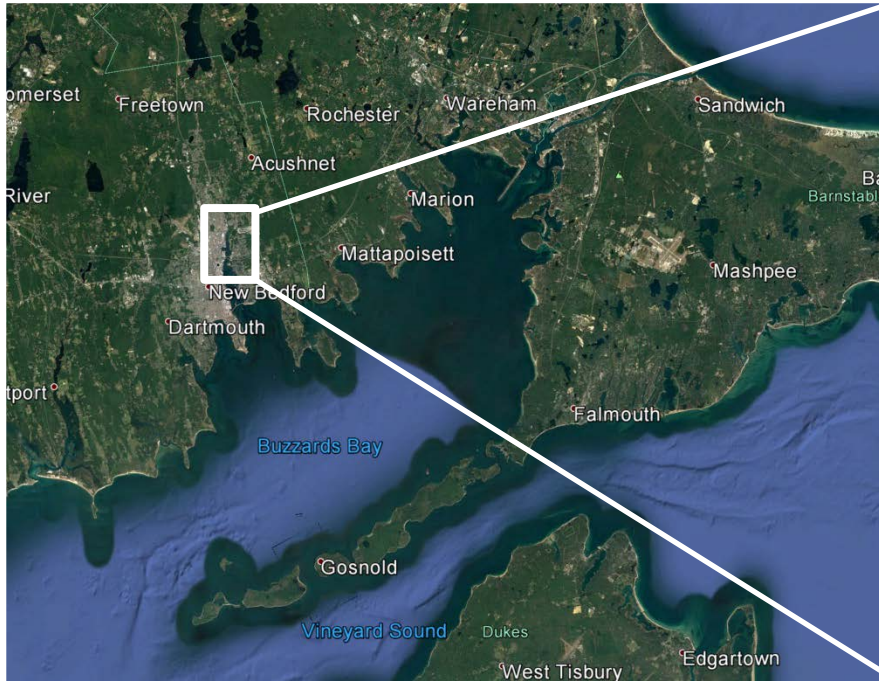
## **FATHOM RESEARCH, LLC/DSRA (WITH CR)**

Marine archaeological re-surveys and on-call services for unanticipated finds (2009 – present)

# And in Consultation with:



# Environmental Setting



# Access Roads and Laydown Areas





# Assessment Survey

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Evaluate a project area's potential for containing intact archaeological deposits, eligible for listing in the State/National Registers of Historic Places, that could be impacted by the project.

# Assessment Survey Results



## Access roads:

- 64 % low sensitivity
- 13 % moderate sensitivity
- 23 % high sensitivity

## Laydown Areas:

- 3 low sensitivity
- 3 high sensitivity

# Recommendations



- Temporary access roads to be raised above the natural surface grade (6–12 inches of aggregate fill and/or construction mats laid over geotextile fabric in sensitive areas)
- No subsurface impacts
- No additional archaeology recommended

# Phase I surveys: Harding I and II

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Determine if archaeological sites are located within a project area.

## **Accomplished by:**

- Background research
- Site visit/walkover
- Subsurface testing
- Laboratory processing

# Harding I and Harding II Results



- No pre-contact materials found
- Plastic recovered between 70-80 cm; plastic indicates sediments deposited in the 20<sup>th</sup> century



- No pre-contact materials
- Core profiles indicate tidally deposited/reworked sediments
- No stratigraphic integrity

# Phase II Site Examinations

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Evaluate identified sites for their eligibility for listing in the State/National Registers of Historic Places.

- Determine site limits (material distribution)
- Determine site age
- Evaluate site integrity
- Determine if a site could provide new information and address important research questions

# Eligibility for Listing

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National Park Service criteria for determining eligibility (36 CFR 60).

- A. Sites that are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. That are associated with the lives of persons significant in our past; or
- C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That have yielded, or may be likely to yield, information important to prehistory or history.

# Phase II Site Examinations

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## 6 SITES:

Osprey Site (19-BR-590)

Pear Island (19-BR-557)

Lacuyers Site (19-BR-555)

Lawson Site (19-BR-378)

Comm Site (19-BR-554)

Dock Site (ACU.11)



# Methods



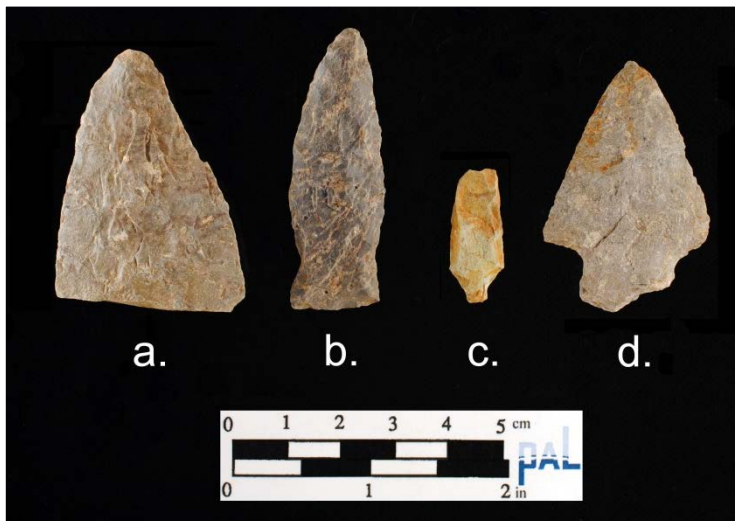
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- Pear Island (19-BR-557)
- Lacuyers Site (19-BR-555)
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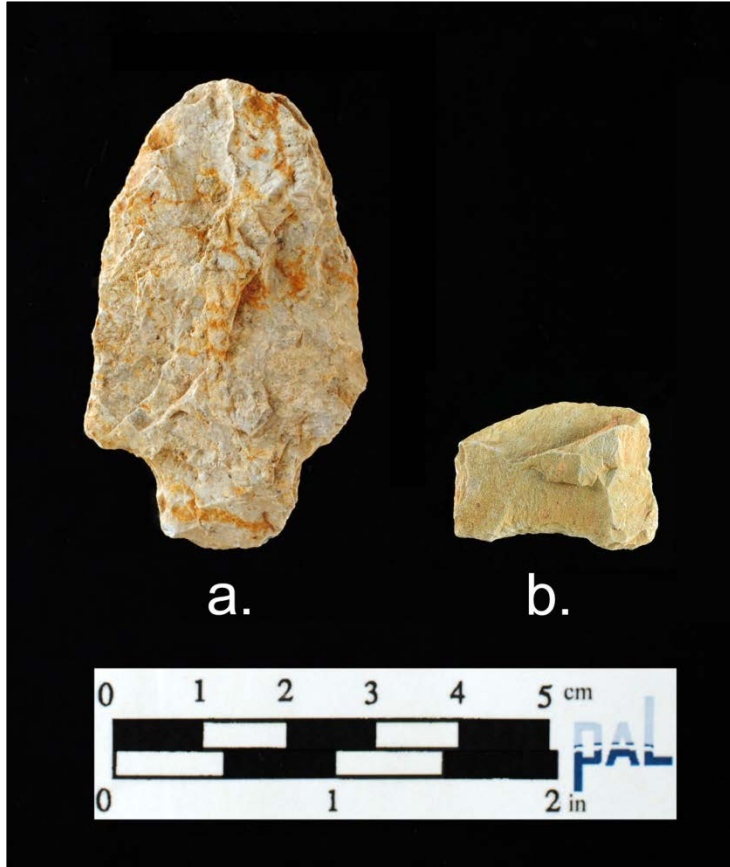
# Osprey Site



- Seasonal camp
- Stone tool manufacture/ maintenance, hunting, food processing represented
- Transitional Archaic age (ca. 3600-2500 BP)
- Occupied during establishment of estuarine environment

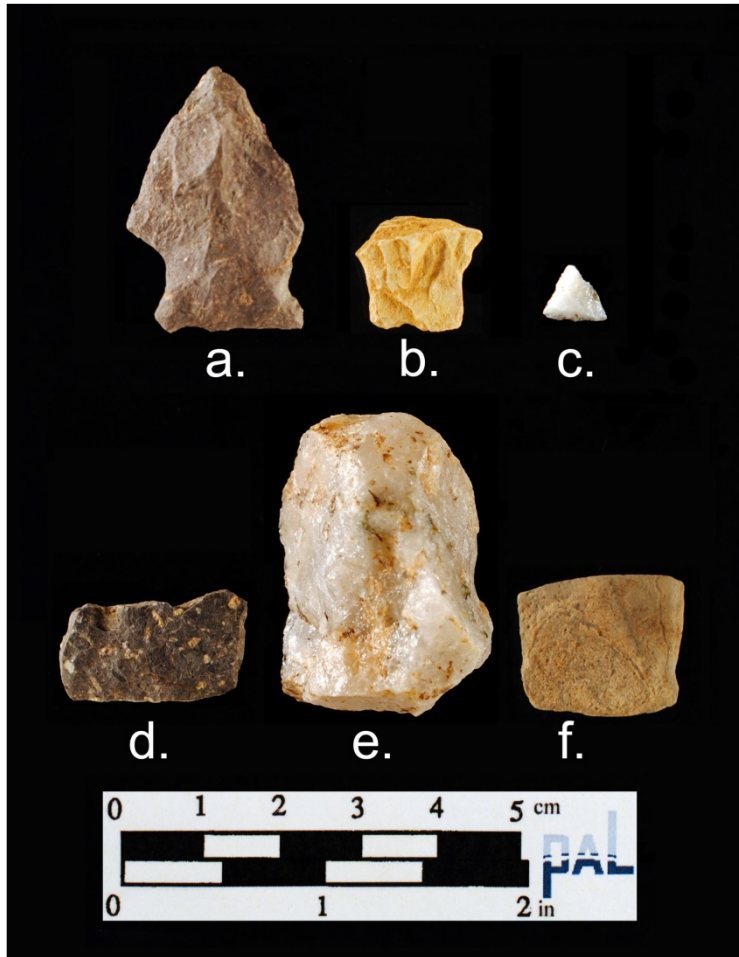


# Pear Island Site



- Temporary camp
- Limited activities represented (stone tool manufacture/maintenance)
- Possible Late Archaic age (ca. 5000-3000 BP)

# Lacuyers Site

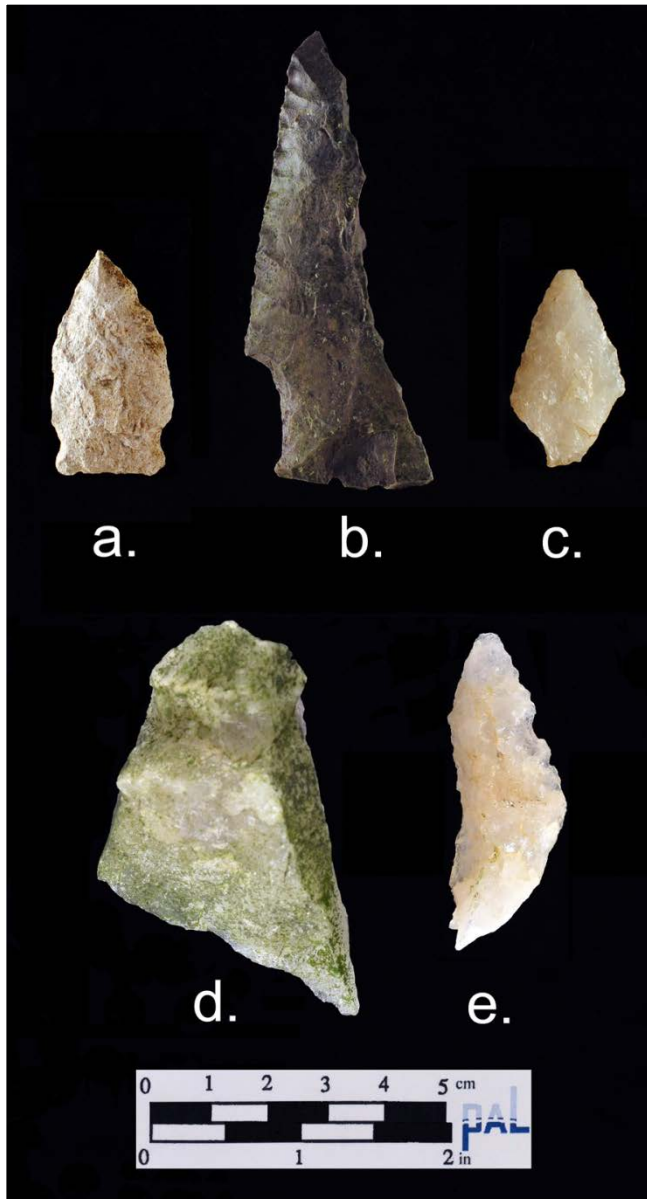


- Temporary/seasonal camp
- Late-Transitional Archaic age (5000 – 2500 B.P.)
- Stone tool manufacture/ maintenance, food and resource processing, camping represented
- Separate occupations or activity areas

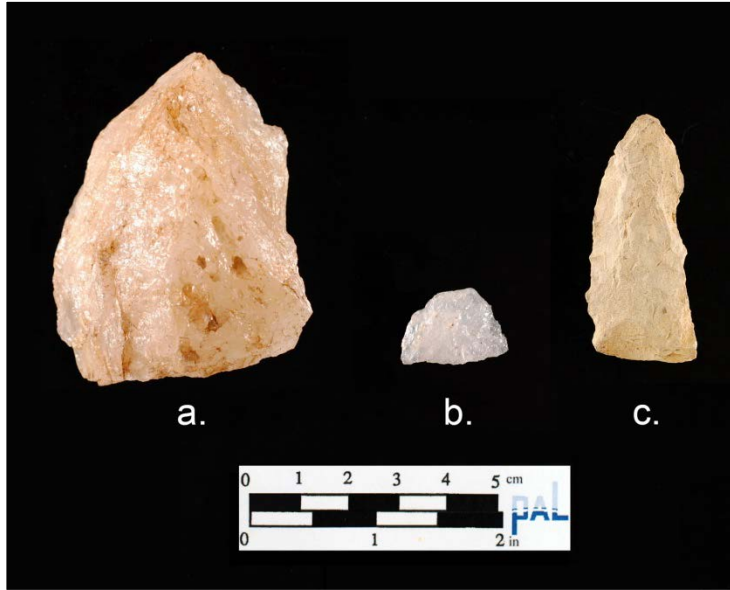
# Lawson Site

(ca. 8000-450 BP)

- Tidal flat and salt marsh areas deflated and/or reworked
- Nature of deposits unknown



# Comm Site

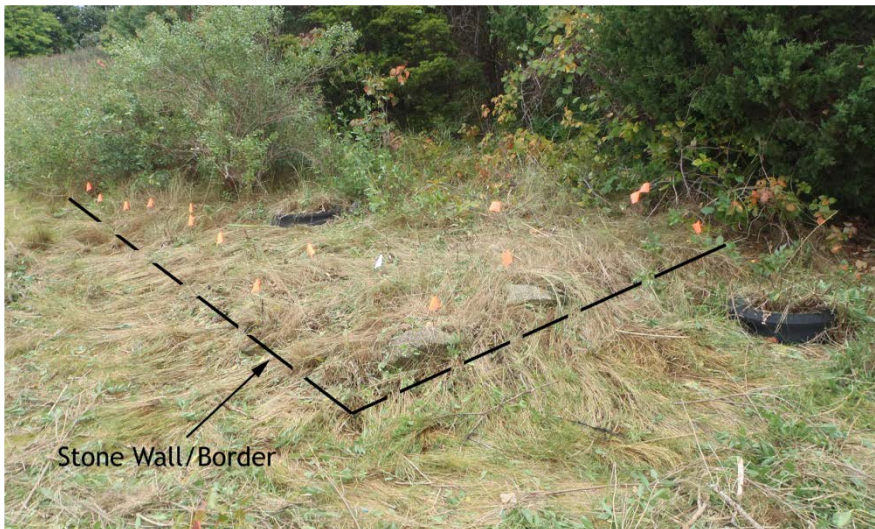


- Temporary camp
- Quartz tool manufacture
- Late Archaic age (5000 – 3000 B.P.)
- Limited activities and low density deposits

# Dock Site



- Stone-lined features: infilled bermed borders, culvert, and culverted creek crossing
- 20<sup>th</sup> century in age (19<sup>th</sup> – 20<sup>th</sup> century ceramic sherds and glass shards)
- Appear related to shoreline management by abutting landowners



# Recommendations

Site	Number	Survey	Integrity	Recommendation
Harding I	19-BR-560	Phase I intensive	Poor	Not National Register eligible; no additional archaeological survey.
Harding II	19-BR-561	Phase I intensive	Poor	Not National Register eligible; no additional archaeological survey.
Osprey	19-BR-590	Phase II site examination	Good	<b>National Register eligible. Limit environmental remediation to the currently proposed remediation line to avoid site impacts.</b>
Pear Island	19-BR-557	Phase II site examination	Good	<b>National Register eligible. Limit environmental remediation to the currently proposed remediation line to avoid site impacts.</b>
Lacuyers	19-BR-555	Phase II site examination	Good	<b>National Register eligible. Limit environmental remediation to the currently proposed remediation line to avoid site impacts.</b>
Lawson	19-BR-378	Phase II site examination	Poor	Not National Register eligible; no additional archaeological survey.
Comm	19-BR-554	Phase II site examination	Good	Not National Register eligible; no additional archaeological survey.
Dock	ACU.1.1	Phase II site examination	Good	Not National Register eligible; no additional archaeological survey.